

NOVEMBER 11, 1934

GUEST, CAPTAIN ALBERT STEVENS

WJZ

AMERICAN-BOSCH RADIO EXPLORER'S CLUB

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5:30-5:45 P.M.

NOVEMBER 11, 1934

SUNDAY

(SIGNATURE - "SAILOR'S HORNPIPE" ACCORDION)

OPENING ANNOUNCEMENT:

Presenting - the weekly meeting of the American-Bosch
Radio Explorer's Club!

(SIGNATURE OUT)

ANNOUNCER:

Come sail the seven seas with us!

(SING AND WAVE EFFECTS)

Explore the wild jungles of Africa!

(JUNGLE EFFECTS)

Visit the cannibal countries!

(TOM TOMS)

Circle the globe with the American-Bosch Round-the-World Radio!

(GUST OF WIND)

CAPTAIN BARKER:

Ahoy there, boys and girls! This is Captain James P. Barker speaking. Rouse out mother and dad for today's muster of the American-Bosch Radio Explorer's Club. We're in for another thrilling meeting today. Our guest explorer, Captain Albert Stevens, is going to tell us about his famous trip into the stratosphere, when his balloon collapsed eleven miles up.

Thrilling business that! Personally, I'd rather go exploring in Davy Jones' Locker - that's where my friend Father Neptune ~~lives~~, and a queer old man he is! The last time I saw him was in the Atlantic, in 1919, when I crossed the Equator in the square-rigged ship Tamar. Right on the stroke of noon a cry rose from the lookout at the foremast head: "Line dead ahead, sir! It's The Old-Man-of-the-Sea!"

A few minutes later Father Neptune came aboard through the hawse-pipes, with the water dripping from his whiskers, and a trident in his hand, "Captain Barker, 'tis glad I am to see you," he boomed, in a rich Irish brogue. "This is the fiftieth time I've met you at the Line."

Then, with his eyes twinkling merrily, he singled out a seaman who had never crossed the Equator before. The poor, frightened fellow was collared by his shipmates who smeared his face with Stockholm Tar. "That's a mighty good lather," said Father Neptune, as he began to shave him with a rusty barrel hoop. "When I'm done with you, m' lad, you'll be a member of my great Brotherhood."

CONT:

When the painful operation was finished, the men gave three rousing cheers. Father Neptune roared, "Fair Winds and God-speed to you all!" Then he strode away for'ard and returned to his kingdom in the ocean's depths.

Observing an ancient custom, Father Neptune always visits ships on the Equator. But let me tell you a little secret-I've always strongly suspected that he was some member of the ship's company dressed up in disguise.

So way enough! Here's Captain Stevens who will be interviewed by our good friend Hans Christian Adamson, of the American Museum of Natural History.....Mr. Adamson.

ADAMSON: Right you are, Captain Barker. Here is Captain Stevens, who with Major Kepner and Captain Anderson, made a stratosphere flight last summer in the largest balloon ever built, under the auspices of the National Geographic Society and the U.S. Army Air Corps. Tell me, Captain, would you care to make another flight into the stratosphere?

STEVENS: Certainly! I know too that Major Kepner and Captain Anderson would be equally willing. We feel we learned so much from the first flight that we could make another stratosphere flight to much greater heights.

ADAMSON: I understand that you used an aerial camera as well as a barograph to measure your altitude, but isn't it difficult to photograph the earth 12 miles below?

STEVENS: Oh, no. 12 miles is nothing. Why we've taken photographs of Mt. Shasta and Mt. Ranier from distances over 300 miles.

ADAMSON: That certainly is remarkable. But to come back to the stratosphere - here is a question that a lot of people would like for you to answer - what is mankind going to get out of stratosphere explorations.

STEVENS: Well, Hans - increased knowledge of air pressure and temperature - wind velocities and directions in the stratosphere will have an immediate value when travel develops to the point where planes travel in the stratosphere.

ADAMSON: When people do fly in the stratosphere, don't they have to use oxygen tanks?

STEVENS: Not tanks - the entire cabin of the plane would be air-tight just as submarines are water-tight, and pilots and passengers would breathe artificial air. However, stratosphere flying will be a very slow and gradual development.

ADAMSON: Seems to me as if a stratosphere plane would really be like a flying submarine. Nothing to be seen but wings shooting out from the sides and a propeller sticking out in front.

STEVENS: Well, I'm not an airplane designer so we won't go into that. But a few weeks ago I heard Dr. Fisher tell the Radio Explorers about the bullet-proof air vest that protects mother earth from shooting stars. Well, that's not the only protective garment the earth has. Way up - maybe 12 miles - maybe 15 miles - perhaps farther - is a layer of ozone that has a tremendous influence on our lives. Without it we could not go into the sunlight at any time of the year without being sunburned in a few minutes, and - unless we wore goggles - we would have sun-blindness within a few hours.

ADAMSON: You don't say! I hope that belt of ozone doesn't break down! Where does it come from and what does it do?

STEVENS: It's supposed to be formed from the oxygen of the stratosphere air under the influence of sunlight. Once formed, it acts as a filter to stop a great amount of the ultra-violet or dangerous short wave rays that come from the sun.

ADAMSON: I see - but what of the cosmic rays we hear so much about - where do they come from?

STEVENS: No one knows.... They originate millions of miles out in space and perhaps come from the stars themselves, under the action of tremendous electrical forces; forces that are thousands of times greater than anything we can produce here on earth, even with the most powerful apparatus.

ADAMSON: Cosmic rays from the stars - how weird! Say, that makes me wonder! Is Stratosphere exploration the first step to the stars?

STEVENS: No, I wouldn't say that. Man can never successfully leave the earth. Furthermore, I don't believe he could exist anywhere but on earth. Life as we know it is probably a very rare event in the universe. Many astronomers believe that, of our own planets, the earth is probably the only one that supports life.

ADAMSON: Bad news to those who want to go to Mars - but tell me - how do you reach that conclusion?

STEVENS: Well, Hans--our earth is the right distance from the sun to receive the proper amount of heat, not too much, not too little.

(CONT. OVER)

CONT: It has an abundance of water in the form of oceans that cover 4/5ths of the earth's surface, and above all, it has an atmosphere.

ADAMSON: But have no other planets atmosphere?

STEVENS: Yes -- some--but they are so cloudy that the sun never gets through. Our atmosphere permits the warm sunlight to reach the earth and yet from time to time it forms clouds and brings rain to our fields. Altogether our atmosphere is a very delicately balanced affair. It is one of the most important things in our life - if not the most important - and yet we know less about it than about many other things. We hope to contribute to our knowledge of it through stratosphere exploration.

ADAMSON: Well, anyway, there's room for a lot of exploration up there --- What is it really like in the stratosphere?

STEVENS: It's a place that could correctly be termed "awful". There is a tendency to feel that the earth has been left behind and that one now belongs to the sun more than to the earth.

ADAMSON: How strange, but why do you get that sensation?

STEVENS: Well, to start with the earth is just a dim, dull area far below, devoid of detail. Above, the intense sunlight dominates everything. There is, of course, no sound at all. As we sailed up through space, we could almost feel the deadly silence outside. The clicking of our instruments seemed a friendly sound. As we rose it got colder and colder. At 60,000 feet our outside thermometer showed nearly 80 degrees below zero Fahrenheit.

ADAMSON: But it wasn't that cold in your airtight cabin, I hope!

STEVENS: Oh no - it was just about freezing - but rapidly getting colder. We were glad we had two sets of heavy winter underwear beneath our flying suits. But cold as it was, the sun was beating on us with terrific intensity. Here we were 12 miles closer to the sun than the people on earth in sub-zero temperature, while down below humanity was gasping in a heat wave.

ADAMSON: But, didn't you ever drift out of the glaring sunlight into a shady cloud?

STEVENS: No, you see there is practically no moisture in the stratosphere, so it never rains, never snows and there is no fog. Since there are no clouds the sun shines brilliantly all day long, and every day is Sunday. Another odd thing about the stratosphere, is the sky. You would think it would be a lovely blue .

ADAMSON: Yes, why not? Since there were no clouds to obscure it?

STEVENS: But it isn't. Just think - there we were---floating in glaring white sunlight. Toward the horizon, the sky was white. Still higher above the horizon it became the customary blue. Still higher than that it became a very dark blue - and straight overhead the sky was almost as dark as black velvet.

ADAMSON: But how do you explain, that, Captain?

STEVENS: Well, the sky was darker from our floating perch because the dust and moisture, which scatter the blue rays of sunlight and give the sky its bluish hue, were largely beneath us.

ADAMSON: You know Captain, the last time I heard you on the radio was when you and your companions were coming down in a crippled balloon. It must have been quite a fight to stay up.

STEVENSON: Well -- Yes and no. You see -- for a time, we had a lot of trouble coming down. After the balloon ripped at the 12 mile level we kept rising for 20 minutes. If it hadn't been for our pneumatic balloon valve, we might have floated in space for some time, like flying dutchmen of the stratosphere.

ADAMSON: "What a pleasant thought," ^{"I said,"} but how do you figure that out?

STEVENSON: "Easy enough -- like this: To make a balloon come down, you have to let out some gas. If we had used an ordinary valve rope, we might have been out of luck, for it might have fouled. In that case we would have had to stay up."

ADAMSON: "But the balloon would have had to come down eventually."

STEVENSON: "To be sure, ^{"Stevens replied."} but we could not afford to have the balloon keep on expanding in its damaged condition. It would be bound to ^{burst} collapse under the increased pressure of the expanding gas, and then we would be lost for keeps."

ADAMSON: What about parachutes?

STEVENSON: We had 'chutes of course but we couldn't use them at 60,000 feet for we couldn't breathe outside the gondola.

ADAMSON: [5] suggested that the next time, Stevens The next time you go up you ought to take a mechanical lung with you like the Navy people use to escape from sunken submarines. Stevens shook his head at this suggestion and added that mechanical lungs would have been of no use at that 12 mile level

STEVENS: ~~Not a bad idea, Hans --- but even that would not work at~~
~~60,000 feet because of the reduced pressure. Experiments~~
"in earthen jars,"
~~in bell jars show that creatures cannot live above~~
~~45,000 feet even if they are supplied with puro oxygen~~
~~because the lungs don't absorb the oxygen at the reduced~~
~~pressure.~~ *So we had to stay in the gondola until*

ADAMSON: ~~How high were you when the balloon finally went to~~
~~pieces and you had to jump to save your lives?~~

we were
STEVENS: ~~Oh, about 1,000 feet over Nebraska. I had a bad time~~
~~getting out of the port hole for by then we were dropping~~
~~at the rate of 60 miles an hour and the air pressure~~
~~forced me back. But at last I got out, fell into space and~~
~~and pulled the rip-cord that released my parachute. As~~
~~I glided toward earth, I saw the wreck of our craft~~
~~scattered on the ground.~~ *earth.*

ADAMSON: ~~What a moment!! ----- and what were you thinking about?~~

STEVENS: ~~"Well, Hans, -- I was wondering how hard I would hit the~~
~~ground, and also how long it would take to build another~~
~~balloon and go on back into the stratosphere. -- if I~~
could raise the money."

about Steve
"And what were you thinking?" I asked.

(end)

ADAMSON: Well, Captain, all I can say is that you have what it takes to deliver the goods. Anyhow, here's thanking you for flying to New York all the way from Dayton to give the Radio Explorers such an interesting and instructive afternoon.

But before you go, would you mind autographing this picture of yourself for the members of the American-Bosch-Radio-Explorers Club.

(APPLAUSE)

STEVENS: All right, Hans, I'll be delighted.

ADAMSON: And now, Captain Barker, the microphone is yours.

BARKER: What an exciting trip that was. Who's our guest next Sunday, Hans?

ADAMSON: A famous young explorer, David Binney Putman, who's going to take us to the Galapagos Islands.

BARKER: And we'll be looking forward to it too. Now let's dip into the mail bag and see what some of our fellow members of the American-Bosch Radio Explorers Club have to say. Albert Bauer in Allentown, Pennsylvania writes: "I listen to your program every Sunday afternoon and enjoy it very much. I have often missed supper just to listen to your adventures, so I am writing to ask you to enroll me as a member of the club". Well, Albert, I am glad to number you in the fast-growing membership of the American-Bosch Radio Explorers Club. Letters like yours are mighty heartening to receive, let me tell you. And here's a note from William Youles in Rochester, New York. He says, "I received the radio map, button and membership certificate of the Radio Explorers Club and I am glad to be a member."

(MORE)

BARKER: (CONT'D)

The map and button are dandy and so is the membership certificate."

You can bet your boots they are, lad ... Anyone of them alone is worth having! And that's why, when I look at all 3 -- the club button, the membership certificate, and the radio map of the world, all of which every member receives, -- I say to everybody listening in from coast-to-coast regardless of age send in your application now for membership in the Radio Explorers Club. You'll be mighty glad you did when you receive your package in the mail.

Now here's Ben Grauer to tell you how easy it is to join....

ANNOUNCER:

To join the American-Bosch Radio Explorers Club merely send your name and address with the name and age of the radio set to which you are listening to American-Bosch, American B-O-S-C-H, Springfield, Massachusetts. And listen to this: Those enrolling this week will receive an extra surprise. -- You just heard Captain Albert Stevens agree to autograph his photo. -- Well you'll receive a copy of it, and it's well worth having. So be sure to enroll today. You know, American-Bosch, with its new 1935 Round-the-World Radios, opens the doors of the whole world of radio adventure to you.

Entertainment from the tip of Africa to the top of Asia... entertainment from every continent on the face of the globe. Leading radio dealers throughout the country looked over the whole field of all-wave radio sets, tested them for their ability to pull in London, Rome, Mexico, South America. In all Radioland, they agree, there is no set, at any price, that can compare with American-Bosch Model 480D. They say its ability to tune in foreign stations is superior to that of any other standard set on the market today.

(OVER)

ANNOUNCER:

Model 480D covers the whole range of long and short wave to 22,500 Kilocycles. Look and listen at your dealer's, to Model 480D and all the other new 1935 American-Bosch Round-the-World Radios.

(SIGNATURE FADES IN)

The makers of American-Bosch Round-the-World Radio are pleased to cooperate with the annual roll call of the American Red Cross by reminding you to continue your support and join your local Red Cross Chapter today... The American-Bosch Radio Explorers Club meets here every Sunday afternoon.

Next Sunday, David Binney Putnam, the famous young explorer.

(SIGNATURE OUT)

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